

The United States, NATO, and the Soviet Threat to Western Europe:

Military Estimates and Policy Options, 1945–1963

As relations between the West and the Soviet Union plunged toward Cold War in the aftermath of World War II, the United States and its allies fearfully beheld what they thought was a massive Soviet capability to successfully invade Western Europe, the conquest of which would drastically alter the world balance of power in favor of the Communists. Western leaders continuously warned that the Soviets had refused to follow the Western pattern of demobilization and that this had left the West to face Soviet armed forces of four million men, all “on a wartime footing” and backed by “war industries going at full blast.” With fewer than twenty ready divisions available to defend the central front in Western Europe (from the North Sea to the Alps) at any time during the period between 1948 and 1960, Western leaders often proclaimed that they had no chance to defend conventionally against the 2.5 million men and 175 line divisions in the Soviet army.¹

There were only a handful of Western leaders who had any doubts about Soviet conventional superiority in Europe during the early Cold War period. One of those was George Kennan, head of the State Department’s Policy Planning Staff in the late 1940s. Secretary of State Dean Acheson and Paul Nitze, Kennan’s successor as head of the Policy Planning Staff, dismissed Kennan’s doubts and in 1950 the Truman administration initiated a major American and NATO conventional buildup to counter the supposed Soviet superiority. Kennan’s protests were revived after 1960, however, when Nikita Khrushchev made a speech claiming that Soviet armed forces at the time of the first Berlin crisis in 1948 had been smaller than the West estimated. American

1. This traditional view was regularly trumpeted throughout the Cold War. The quotations here are from one of the many editions of *NATO Facts and Figures* (Brussels, 1969), 14. In November 1948, a British and American Joint Intelligence Committee concluded that the Soviets could conquer all of Europe along with most of Eurasia in just a few months. JIC 435/12, 30 November 1948, Note by the Secretaries to the Joint Intelligence Committee on Soviet Intentions and Capabilities, 1949, 1956/57, *Records of the U.S. Joint Chiefs of Staff, 1946–1953: Soviet Union* (Frederick, MD, 1980), microfilm, reel 3, frames 0014–0106. And as late as 1959, Dwight Eisenhower said that the West could not fight a ground war in Europe even with a few additional divisions because of the overwhelming enemy force of 175 divisions. *New York Times*, 12 March 1959.

intelligence experts and even Paul Nitze himself generally came to accept Khrushchev's claim.²

Some recent historians have even charged that Western military leaders purposely exaggerated Soviet conventional capabilities to frighten the West into an unnecessary military buildup. Matthew Evangelista, for instance, has argued that Western military analysts consciously overestimated the number of Soviet men and divisions, ignored the fact that Western and particularly American divisions were larger than Soviet divisions, and rejected the generally accepted notion that an invader required a 3:1 power advantage over the defender to be confident of victory.³

Such charges have helped lead historians to wonder whether the whole course of Western rearmament in the early Cold War was misguided. First, according to such critics, the Truman administration made plans under NSC-68 and NATO's Lisbon Goals to raise huge and expensive conventional forces based on exaggerated estimates of Soviet capabilities. Then, when conventional forces of such magnitude proved economically and politically out of reach, President Dwight Eisenhower turned to a policy of massive retaliation, a policy dependent on a perpetual race for nuclear superiority to counter not only the growing Soviet nuclear arsenal but also the perceived overwhelming Soviet conventional superiority in Europe. Only when the Kennedy administration came into office did Robert McNamara and his computer analysts reassess the situation and, as one of those experts testified in a 1971 book, conclude that while a conventional option had appeared impossible in earlier years, "it now began to appear that perhaps NATO could have had one all along."⁴

2. In his memoirs Kennan remembered the "highly inflated estimates of Russian conventional military strength that had already become ingrained (we will not at this point, ask why) in the official assessment of NATO defense needs, and with the resulting belief on our part that we could never meet the Russians successfully on non-nuclear ground." George F. Kennan, *Memoirs, 1925-1950* (Boston, 1967), 501. For the dismissal of Kennan's ideas see Jerald A. Combs, "George Kennan, Paul Nitze, and the Issue of Conventional Deterrence in Europe, 1949-1952," *Diplomatic History* 15 (Summer 1991): 361-86. For general acceptance of Khrushchev's claims see Raymond L. Garthoff, "Estimating Soviet Military Force Levels," *International Security* 14 (Spring 1990): 93-95; Paul Nitze, "NSC 68 and the Soviet Threat Reconsidered," *ibid.* 4 (Spring 1980): 171. A recently declassified intelligence study headed by Ernest R. May concluded that the U.S. Army should have known from its intelligence sources that, at the time of the Berlin crisis of 1948, "many of the alleged 175 Soviet divisions were shells and that a number of the divisions in Eastern Europe counted as combat ready were in fact no more so than were American occupation units." Ernest R. May, John D. Steinbrenner, and Thomas W. Wolf, *History of the Strategic Arms Competition*, ed. Alfred Goldberg (Washington, 1981), 57.

3. Matthew A. Evangelista, "Stalin's Postwar Army Reappraised," *International Security* 7 (Winter 1982-83): 110-38. John S. Duffield, "The Soviet Military Threat to Western Europe: US Estimates in the 1950s and 1960s," *Journal of Strategic Studies* 15 (June 1992): 208-27, does not make such specific charges but does wonder if Western military officials purposely overestimated the size of the Soviet army. Daniel Yergin, *Shattered Peace: The Origins of the Cold War and the National Security State* (Boston, 1977), 271, also implies that the threat was exaggerated because "the services were battling against each other for a share of the budget, and threats were required to defend their claims."

4. Samuel F. Wells, Jr., "Sounding the Tocsin: NSC 68 and the Soviet Threat," *International Security* 4 (Fall 1979): 116-58; Alain C. Enthoven and K. Wayne Smith, *How Much Is Enough? Shaping the Defense Program, 1961-1969* (New York, 1971), 141.

Many critics have concluded, then, that exaggerated notions of Soviet capabilities made it almost impossible for Western leaders to consider the alternative policies recommended by Kennan. The Truman administration quickly rejected his first suggestion that the West should base its policy on Soviet intentions rather than capabilities and, presuming that the Soviets had no intention of invading Western Europe, avoid a military buildup entirely. The Truman administration also dismissed his fallback suggestion, which amounted to an earlier acceptance of the policy Kennedy and McNamara adopted, to base Western policy on a lesser estimate of Soviet capabilities on the grounds that Soviet strength was exaggerated and that any war in Europe was more likely to be unintentional and limited rather than a deliberate invasion involving the maximum mobilization of Soviet power.⁵

An accurate assessment of Soviet conventional capabilities in Europe, then, is vital to judging the viability of the policy options that Western leaders debated in the early Cold War period. Unfortunately, a final answer on Soviet capabilities is still not possible. While a vast treasure trove of documentary material is slowly emerging from the archives of the Eastern bloc, the Soviet military files for the late 1940s and early 1950s are still inaccessible, and the few military documents that the Russians have released have been selectively edited.⁶ Nevertheless, recently opened Western sources, including contemporary orders of battle, strategic intelligence digests, and National Intelligence Estimates, when combined with Soviet statements and later revelations,⁷ are now capable of bringing us much closer than we have been to an accurate assessment of Soviet capabilities and the policy options that were available to the West in light of those capabilities.⁸

5. Kennan's explanation and defense of these options are discussed in Combs, "George Kennan, Paul Nitze, and the Issue of Conventional Deterrence in Europe."

6. One of the few examples of Soviet military release of highly classified documentary material occurred in *Voyenno-Istoricheskiy Zhurnal* 2 (February 1989). This included a listing of post-Patriotic War manpower demobilization schedules, a 1946–1948 operational plan of the group of Soviet occupation forces in Germany, and an interpretive piece that called for "an objective approach to an analysis of both historical and contemporary events," albeit with a subtitle "Aggressive US Postwar Posturing Led to Cold War." While both the demobilization report and the war plan appear to be genuine and a real contribution to Soviet Cold War documentation, nevertheless they illustrate what makes dealing with Soviet material so frustrating. The demobilization report presents a detailed list of men demobilized in each region, but it never identifies the aggregate starting point, the duration, the replacement rate with new draft cohorts, or the end point, without which it is impossible to draw any meaningful conclusions.

7. For some of those later revelations, the authors would like to thank posthumously two Soviet generals whose inside understanding and patient tutoring of Karber made some key points of this paper possible: Petrov Grigenko, former lieutenant general of the Soviet army, for his insight into the Soviet cadre/mobilization system during a series of interviews with Karber in Washington, DC, 1979 and 1980; and Andrei Volkoganov, major general and director of the Military History Institute, for his help on Stalin's war planning related to the Korean War during a 1991 interview with Karber in Moscow.

8. Much of the documentary material used for this article comes from two projects on which Phillip Karber worked. In 1978 the European-American workshop commissioned a set of studies on the origin and evolution of the Central European arms competition and the potential for conventional arms control. In the process, various U.S. and West German agencies cooperated in

These new sources make clear that American and NATO military intelligence officials did not purposely exaggerate Soviet conventional capabilities. In fact, they seem to have underestimated those capabilities as often as they overestimated them. Moreover, the problems they had in estimating Soviet capabilities concerned primarily the interior of the Soviet Union, not the forces in Eastern Europe and the western districts of the Soviet Union that would have participated in any invasion of Western Europe. American and NATO leaders were generally able to construct an accurate estimate of Soviet capabilities oriented toward Western Europe and of the policy options available to them.

Thus, despite a probable overestimate of the overall manpower in the Soviet armed forces in 1948, Western leaders understood Soviet weaknesses as well as strengths at the time Stalin blockaded Berlin and rightly concluded that the blockade was not a prelude to an immediate invasion. They also recognized that the Soviets were increasing their conventional capabilities in Europe after 1948 and correctly judged that available NATO forces in Western Europe were incapable of defending against a Soviet invasion of Europe without a major conventional buildup or early use of nuclear weapons. Finally, despite some initial misunderstandings about the reduction of Soviet conventional capabilities after 1955, they correctly understood that the correlation of Soviet and NATO capabilities did not make possible the implementation of the No Early First Use policy in Europe until 1962–63, when Robert McNamara and the Kennedy administration imposed it on NATO.

The first part of this article, then, will discuss Western estimates of Soviet conventional capabilities. The second part will deal with Western policy options and responses to those estimates.

the declassification of intelligence reports and force planning studies. When cited here, these documents are listed as the "Karber Collection," which is deposited at the Potomac Foundation of McLean, Virginia. The results of this project are available in a series of publications by Karber: "The Central European Arms Race, 1948–1980," paper presented at the Stiftung, Wissenschaft und Politik Conference on Negotiated Constraints in Europe, Ebenhausen, FRG, June 1980; "Die Konventionellen Kräfteverhältnisse in Europa: 1965–1980," in *Sowjetische Macht und Westliche Verbandlungenpolitik Im Wandel Militarischer Kräfteverhältnisse*, ed. Uwe Nerlich (Baden-Baden, 1982); *Playdoyer für die Vorverteidigung Pro Pace: Beiträge und Analysen Zu Sicherheitspolitik* (Bonn, 1984); "NATO Doctrine and National Operational Priorities: Coalition Commitment and Conventional Defense," in *Power and Policy: Doctrine, the Alliance, and Arms Control*, ed. Jonathan Alford (London, 1986); *Conventional Arms Control and the Security of Europe*, ed. Uwe Nerlich and James A. Thomson (Boulder, 1988); and "Operational Continuity and Change within the Central European Conventional Arms Competition," with A. Grant Whitley, in *NATO at Forty: Change, Continuity, and Prospects*, ed. James K. Golden et al. (Boulder, 1989).

Also, between 1988 and 1994, Karber served as chair of the "Data Base Task Force" for the four nation (U.S., UK, FRG, and France) Nuclear History Program. During this project, several thousand order-of-battle documents, weapons handbooks, and analytical studies were declassified by the participating governments. The material from them has been collated into fifteen volumes of comparative force development and deployment data that are stored at the National Security Archives, George Washington University, Washington, and the Stiftung Wissenschaft und Politik, Ebenhausen, Germany.

American intelligence analysts first estimated Soviet capabilities by tracking the progress of the Soviets in demobilizing their immense World War II armed forces of well over twelve million men. They tracked that progress primarily by using Soviet public pronouncements and checking on the accuracy of those pronouncements through intelligence sources. They based much of their calculation on a statement directly from Joseph Stalin to a group of visiting American congressmen on 15 September 1945 that he would be releasing six to eight million men from the armed forces and reducing the Soviet army to about one-third of its wartime strength. The Soviets implemented Stalin's policy in a series of demobilization decrees that discharged their conscripted personnel according to their birth dates. By estimating the size of these demobilized cohorts, American intelligence could calculate the reductions of Soviet manpower down to the level Stalin had prescribed.⁹

Unfortunately, the Soviets did not provide an exact starting or ending point for their demobilization. So the Americans used as a starting point an estimate of 12.5 million men in the wartime Soviet armed forces as of May 1945. Subtracting the nearly nine million men in the demobilized cohorts and adding back in displaced persons and prisoners of war who were being reenlisted, they calculated in June 1946 that there would be somewhere between 4.5 and 4.8 million men in the Soviet armed forces by September 1946. In July 1947 they estimated that the Soviets had reduced their armed forces to 3.75 million, 2.6 million of whom were in the army. Finally, in June 1948, after the final Soviet demobilization decree of February 1948, the Americans adjusted that estimate slightly to 4 million men in the Soviet armed forces, with 2.5 million of them in the army, very close to Stalin's figure of one-third of wartime strength. There the American and Western manpower estimate remained from 1948 to 1960.¹⁰

Until the fall of 1947, American intelligence officials also used their manpower calculations to estimate the number of divisions in the Soviet army. To do so they simply divided the manpower by fifteen thousand, the number of men they believed would compose a peacetime division slice (a division plus supporting troops outside the divisional structure). Thus, as of July 1947, they estimated that the Soviets had in their army 2.6 million men divided into 173 "ground divisions," which included 153 line divisions and 20 artillery divisions. The analysts expected the Soviet army to

9. General Staff, US Army Foreign ORDERS OF BATTLE Periodic Summaries: 1946-1954, June 1947, Karber Collection. This is one of a series of OBs that were issued monthly in 1946, bimonthly in 1947 and 1948, and quarterly after that. Hereafter they will be cited as Order of Battle, date, Karber Collection. Demobilization Decree I of 23 June 1945 released the classes of 1896 through 1908, or men between the ages of 38 and 50, along with officers above a certain age. Demobilization Decree II of 25 September 1945 released the classes of 1909 through 1918, all women, thrice-wounded soldiers, and a few other categories. Demobilization Decree III of 21 March 1946 released the classes of 1919 through 1924.

10. Ibid., June 1948, and Strategic Intelligence Digest (SID) U.S.S.R., July 1947, Karber Collection.

continue to decline and stabilize at about 2.25 million men and 150 ground divisions.¹¹

In November 1947, however, their methodology and estimate changed dramatically, probably because they received new intelligence. There was now no more talk of arriving at the number of active Soviet divisions by simply dividing the division slice into the total manpower. Instead, they stated flatly that the Soviets had 175 line divisions and listed them by type while omitting the artillery divisions from the count and including them as part of the division slice. From now on, instead of deriving the number of divisions from their estimates of manpower, American intelligence officials would attempt to rationalize their manpower estimates with the number and distribution of divisions. This caused them some difficulties because a 175-division force seemed somewhat large for the amount of manpower the Americans estimated the Soviets to have after their demobilization. Maintaining an army of 2.5 million men would leave them with a division slice of only 14,300, slightly smaller than the 15,000 they expected, and therefore providing fewer support troops than the Americans assumed the Soviets would have.¹² Nevertheless, as noted above, by June 1948 U.S. military intelligence settled on the figures of 4 million men in the armed forces, including 2.5 million men in a 175-division army. Both the division and manpower figures were roughly congruent with Stalin's stated intention to reduce his wartime armed forces by about two-thirds, and these estimates remained constant until after 1960.

American intelligence officials had a remarkable and secret methodology both to confirm that their estimate of Soviet divisions was accurate and to help them understand what the Soviets could do with those divisions. Starting in 1943, the Soviets assigned to each of their units a postal number for identification. During the early Cold War, Western intelligence could acquire that number in various ways, most often by the interception of radio traffic between Soviet units. American analysts were able to make sense of this Soviet Field Post Number system with the help of General Reinhard Gehlen, the head of German Army Intelligence for the Eastern Front during World War II, who took refuge in the West after the war and brought with him fifty file cabinets containing the Field Post Numbers and unit histories for much of the Soviet

11. 2.6 million divided by 15,000 equals 173. 2.25 million divided by 15,000 equals 150. At this point the estimators included the twenty supporting artillery divisions as part of the divisional structure rather than as part of the divisional slice. Strategic Intelligence Digest, U.S.S.R., July 1947, Karber Collection.

12. Stalin issued the final version of the Soviet mobilization plan, discussed below, at the end of 1946, and it may have been the Western interception of it that led to this new estimate. Order of Battle, November 1947, Karber Collection. May, Steinbrenner, and Wolf argue in their recently declassified *History of the Strategic Arms Competition*, 81, that these figures should have alerted the West to the fact that "most of [the alleged 175 Soviet divisions] were shells." In fact, a division slice of 14,300 was still enough to make the Soviets capable of mobilizing an attack force very quickly, as will be discussed below, and would have meant that most active Soviet line divisions were far from shells.

wartime force.¹³ Thus, Western analysts could track the location and activity of Soviet divisions and many of their subordinate units. As Field Post Numbers disappeared from Soviet communications traffic, analysts could assume they had been demobilized. They traced the disappearance of 109 units during 1947 and more in 1948.¹⁴

It took until July 1952 for the FPN system to confirm the existence and location of all 175 active Soviet line divisions that American intelligence believed to exist.¹⁵ Meanwhile, however, the estimate of 175 divisions with 2.5 million men seemed reasonable because the division slice it produced of 14,300

13. The Soviets introduced the FPN system in 1943. The German files passed to the United States in 1947, and the Americans used them first to track the demobilization, reorganization, and withdrawal of the Soviet army from East Germany. The data base was updated by "Operation Hermes," the methodical interviewing of thousands of returning German soldiers who had been held as POWs in the Soviet Union and had worked in and around various military installations. In 1949 a special project was undertaken to correlate the FPN data base with "all source" intelligence focused on Soviet army units in the interior of the USSR. Completed in July 1952, the results, classified "Top Secret with Special Handling Required," had confirmed the 175 division order of battle. The uncertainties remaining were less about the existence of a unit than whether it had been converted to another type of formation. In 1954, the Soviets discontinued the use of censorship numbers, and by 1956 the FPN system had declined greatly in usefulness for current intelligence. In 1957 and 1958, a review of all the data was summarized in two U.S. Army intelligence project reports. The first "all-source" report is "Soviet Army Units in the USSR Identified by A[rmy] P[ostal] N[umber] during the Period of 1949–1952," with an annex of fourteen typed lists (Military Evaluation Section B – 1288, July 1952). The U.S. Army intelligence reports are: Project A-291, "Order of Battle Compilation, Soviet Ground Forces" (Department of the Army, Office of the Assistant Chief of Staff, Intelligence, Washington, DC, 19 April 1957); and Project Number A-1728, "Order of Battle Compilation, Soviet Ground Forces" (Addendum to Project Nr A-291, Department of the Army, Office of the Assistant Chief of Staff, Intelligence, Washington, DC, 15 August 1958), both in Karber Collection.

For open source discussion of the FPN system see Robert G. Poirier and Albert Z. Conner, *The Red Army Order of Battle in the Great Patriotic War* (Novato, CA, 1985), 5; W. Victor Madej, ed., *Red Army Order of Battle: 1941–1945* (Allentown, PA, 1983), 1; Walter S. Dunn, Jr., "Deciphering Soviet Wartime Order of Battle: In Search of a New Methodology," *Journal of Soviet Military Studies* 5 (September 1992): 408–9. For a discussion of the Gehlen cache of documents and other contributions (both good and evil) to Western intelligence see Reinhard Gehlen, *The Service: The Memoirs of General Reinhard Gehlen* (New York, 1972); Heinz Holne and Herman Zolling, *The General Was a Spy* (New York, 1972); and Christopher Simpson, *Blowback: The First Full Account of America's Recruitment of Nazis, and Its Disastrous Effect on Our Domestic and Foreign Policy* (New York, 1988). The latter does not include a discussion of the Field Post Numbers, but it does include a rather distorted version of Western intelligence on the Soviet army.

14. USSR Military Evaluation Branch, "Soviet Army Units in the USSR Identified by FPN during the Period of 1949–1952 [July 1952]," FRG Collection, Nuclear History Project, Stiftung Wissenschaft und Politik, Ebenhausen, Germany; Intelligence Research Project, Order of Battle Compilation, Soviet Ground Forces, 19 April 1957 and 15 August 1958, Karber Collection.

15. John Duffield has quite understandably questioned the accuracy of the 175 division number because U.S. intelligence was not identifying all 175 divisions by location in an accessible Order of Battle even as late as 1953. Duffield, "The Soviet Military Threat to Western Europe," 215. Prior to July 1952, the failure to identify the location of all 175 divisions may have been because they did not all exist. But because the FPN system confirmed this exact number of Soviet divisions throughout the 1950s, it is likely that all existed in some form from November 1947 on, and it took that long for the United States to find them all, or that it was a Soviet planning figure intercepted by the West and the Soviets were building toward it. After 1952, there were different reasons for the failure to list the location of all 175 divisions. First, the Americans did not want to compromise their FPN source, so they refused to confirm the existence and location of a division in Orders of

men constituted 60 to 80 percent of a fully manned division slice, and that was the level at which the Soviets historically organized their forces for easy mobilization.¹⁶

Under Soviet army organization principles, divisions in peacetime were not usually manned at 100 percent of their Tables of Organization and Equipment (TO/E). Many active divisions would instead operate at a reduced level of about 70 percent of their prescribed manpower but 100 percent of their equipment. A reduced division would be missing one unit at each level from battalion on down – each battalion was missing one company, each company one platoon, and each platoon one squad. Moreover, most squads would contain eight rather than the prescribed eleven men, and many support units would be reduced even more severely. During mobilization these divisions could be brought to full strength by simply adding back in the missing units while enlarging the size of the squads and the support units. If the divisions were needed more quickly, however, they could be committed as they were with their strength reduced by one unit at each level.¹⁷

Having acquired several Soviet mobilization plans, the United States had an excellent idea of how the Soviets would mobilize these and other of their forces.

Battle to be shared with NATO allies until they received collateral information that could be the plausible source for the identification of a unit and disguise the existence of the FPN intelligence. Such collateral information was often difficult to acquire for units in the Soviet interior. Second, between 1949 and 1952 there was persistent ambiguity about the 175 divisions because the Soviets were combining and cannibalizing rifle and cavalry units as they created new mechanized divisions and it was not clear what would finally emerge. Third, U.S. military intelligence followed a conservative course with regard to these units undergoing conversion and did not list any of them in orders of battle below the level of top secret until the ambiguity as to their type and location was resolved.

16. Postwar Soviet orders of battle produced by American intelligence regularly stated that “available information is insufficiently precise to warrant a strength estimate for each individual division. It is estimated, however, that the average unit strength varies between 60 and 80 percent of wartime Tables of Organization.” “Soviet and Satellite Order of Battle,” 2 June 1951, *Records of the Joint Chiefs of Staff, 1946–1953: Europe and NATO*, reel 7, frames 0766–96; “Soviet and Satellite Order of Battle,” 27 May 1953, *Records of the Joint Chiefs of Staff, 1946–1953: Europe and NATO*, reel 8, frames 0729–58. The division slice for a fully manned wartime Soviet division was estimated at about 19,000. JIC 266/1, 4 November 1946, Logistic Requirements of Soviet Divisions, *Records of the Joint Chiefs of Staff, 1946–1953: Soviet Union*, reel 1, frames 0886–0903; JIC 636/2, 11 June 1953, Maximum Number of Soviet Divisions Which Could Be Employed for an Attack on Western Europe – 1954, *Records of the Joint Chiefs of Staff, 1946–1953: The Soviet Union*, reel 7, frames 0155–65; JIC 558/205, 13 May 1953, Report of the Ad Hoc Logistical Intelligence Committee Convened in London, February 1953, RG 218, Records of the Joint Chiefs of Staff, Geographical File, 1951–1953, 092 Western Europe (3–12–48), sect. 219, National Archives.

17. Department of the Army Pamphlet no. 30–50–1, *Handbook on the Soviet and Satellite Armies, Part I, The Soviet Army* (Washington, March 1953). This reduced active division was one of five rather flexible levels of manning under Soviet organizational principles. Wartime divisions, of course, would have close to 100 percent of their manpower and, if assigned a special mission, would have more than 100 percent of that manpower. Other peacetime divisions could be cadred with all of their officers and equipment but only 25 percent of their manpower. Cadred divisions could be committed as regiments if an emergency required their service before they were filled out with reserves. Finally, as explained below, the Soviets maintained skeletal “clone divisions” with only about 10 percent of their manpower.

Again with the help of German sources, the United States had access to the basic Soviet mobilization plan that Stalin had promulgated in 1939 and modified in 1940 and 1941. Stalin revised and reconfirmed that plan in late 1946, and the United States not only knew of this revised plan but appears to have acquired it in mid-1947.¹⁸

Soviet mobilization planning consisted of three overlapping types of activity: a force structure plan tied to a schedule for generating several waves of divisions; a resource mobilization plan listing the men and supplies to be called up and inserted into that structure from the local military districts and from the strategic reserves; and a deployment plan for the movement and assembly of the resulting forces in accordance with the strategic direction of a unit war plan. Despite the detailed nature of the mobilization plan, it was also very flexible. It set out procedures for both partial and full mobilization and for secret as well as open mobilization.¹⁹

The United States and other nations had had an opportunity to see the Soviets implement this plan during World War II. In the period before Hitler's 1941 attack, the Soviets had carried out a secret partial mobilization, or what they called "creeping up to war." After the German invasion, the Soviets tried to expand this to a general mobilization under wartime conditions. They failed to reach their general mobilization goals as quickly as their plan prescribed because their front collapsed, the initial campaigns disrupted their plans, and Stalin's prewar purges and produced a shortage of trained officers because of Stalin's prewar purges. The Soviets paid dearly for this failure but were still able to mobilize more than three hundred new divisions in the space of five months during 1941. And none of the obstacles that hindered them in 1941 seemed likely to do so in the postwar era. Consequently, the War Department concluded in 1946 that the Soviets were capable of implementing their full mobilization plan to get the active army ready within five days of mobilization (M+5) and reserve units within thirty days, something they had actually done in World War I. Unless there was an emergency, American intelligence estimated that these forces could be committed to battle some thirty days after their mobilization (M+30 for the active army and M+60 for the reserves).²⁰

18. Strategic Intelligence Digest, U.S.S.R., July 1947, pp. 14–15, Karber Collection; Lt. Col. P. Shchabel'nikov, "Ustav Vnutrennei Slughby" [Statute of military service in the armed forces of the USSR], *Voennye Znaniia* 1 (January 1953): 7; David M. Glantz, "Soviet Mobilization in Peace and War, 1924–1942: A Survey," *Journal of Soviet Military Studies* 5 (September 1992): 323–62. Albert Z. Conner and Robert G. Poirier, "Soviet Ground Force Mobilization Potential: Lessons of the Past and Implications for the Future," *ibid.* 1 (June 1988): 213–30, esp. 221–27. It may well have been acquisition of the 1946 plan that led the Americans to accept the 175 division estimate in November 1947 and perhaps the 4 million armed forces and 2.5 million army figures in June 1948, as noted above. In 1950, the Americans certainly spoke of the Soviet plan for mobilization as if they knew of it from Soviet sources. JCS 2073/7, 27 February 1950, "Intelligence Guidance for the U.S. Representative on the Regional Planning Groups of the North Atlantic Treaty Organization," RG 218, U.S. Joint Chiefs of Staff, 092 Western Europe (3–12–48), sect. 42.

19. Glantz, "Soviet Mobilization in Peace and War."

20. *Ibid.*, 343; Conner and Poirier, "Soviet Ground Force Mobilization Potential," 216, 225. See also Glantz, "Soviet Mobilization in Peace and War," 352; Strategic Intelligence Digest, U.S.S.R.,

By 1948 the Soviets seemed well organized to put their mobilization plan into effect. In addition to the 175 active divisions that would presumably be ready by M+5, the Soviets maintained some 140 “ghost” or “clone” reserve divisions. These divisions were relatively empty shells, each of which was usually co-located with one of the 140 active divisions stationed on Soviet (as opposed to Eastern European) soil. Most clone divisions were rifle units requiring a minimum of heavy equipment, and on mobilization they would be filled up with reservists to be supervised by officers, NCOs, and other personnel drawn from their active division twins. The mobilization of these 140 clone divisions would bring the 175-division Soviet army up to over 300 divisions by M+30 to be committed to battle by M+60. Meanwhile, some cadre would be left behind to organize the immense remaining Soviet manpower into further divisions according to the following estimated schedule.²¹

	Field Divisions	(Incl. Divs. in Field and Basic training)	Ground Forces
M Day	175	175	2.5 million
M+30 Days	320	345	8.0 million
M+180 Days	320	470	10.5 million
M+365 Days	470	520	12.0 million

The Soviets certainly had the manpower to implement this mobilization plan. They inducted 750,000 men into the armed forces each year (the yearly cohort) and released a comparable number of men into the reserves. The Americans estimated in July 1946 that the Soviets had close to 10 million men available for military service. The British further calculated that the Soviets would have a pool of 11 million men available for military duty in 1950 and 15 million by 1955. Thus, the Americans concluded that the major problem facing Soviet mobilization, given their fund of hardened war veterans and their manpower training system, would not be the supply of men but “the allocation of technicians and individuals with mechanical skills among the three military services and the war economy.”²² This manpower mobilization capability

July 1947, p. 19, Karber Collection; and Order of Battle, June 1946, Karber Collection. Even in 1951, when the Soviet army was much more built up and prepared, U.S. intelligence recognized that the Soviets would require some time to commit their mobilized troops to battle except in a real emergency. Note by the Secretaries to the Joint Intelligence Committee on Commanders' Estimate of the Scale and Nature of the Immediate Communist Threat to the Security of the United States, 13 May 1951, RG 218, Joint Chiefs of Staff, 092 USSR, sect. 55.

21. Department of the Army Pamphlet no. 30-50-1, *Handbook on the Soviet and Satellite Armies*; JCS 2073/7, 27 February 1950, “Intelligence Guidance for the U.S. Representatives on the Regional Planning Groups of the North Atlantic Treaty Organization,” RG 218, U.S. Joint Chiefs of Staff, 092 Western Europe (3-12-48), sect. 42.

22. Louis B. Ely, *The Red Army Today* (Harrisburg, PA, 1949), 14; Order of Battle, July 1946, Karber Collection; WO 208/4111, British Intelligence Survey: USSR, September 1948, Public Record Office, Kew Gardens, London (hereafter PRO); “The Strength and Capabilities of Soviet

particularly impressed the Americans. George Marshall and Harry Truman remembered the excruciating length of time it had taken the United States to mobilize its divisions at the beginning of World War II and were trying to establish something similar to the successful Soviet system with their proposal for universal military training.

The Soviets also had the arms and equipment necessary to implement their mobilization plan. Although both the West and the Soviets demobilized many of their troops after the end of World War II in Europe, they followed very different policies regarding demobilization of equipment. The Western powers scrapped and ceased production of many of their weapons after World War II. Practically all of the equipment of the European armies was lost or destroyed and, in contrast to the Russians, little attempt was made to replace it until after the Berlin blockade of 1948.²³

The Soviets, on the other hand, kept most of their equipment and reorganized their entire force structure around it. First, they reduced their tank and mechanized corps to divisions without much reducing the amount of arms and equipment. They used surplus arms to convert their cavalry to tank divisions and their rifle to mechanized divisions. In this way, the peacetime Soviet military structure of 175 divisions kept and made use of much of the armament that had formerly supplied a 500-division wartime force.²⁴

The Soviets also continued a major arms production program. In 1948, British intelligence asserted that the Soviets were producing between 1,000 and 2,000 planes per month, almost all of which were military planes. It was little comfort that this was down from a wartime monthly production high of 4,000, for the United Kingdom was producing only 150. The United States was producing 1,500 planes per month, but only 100 of those were military. Given the rate of aircraft production the Soviet Union was already achieving, a Joint Anglo-American Intelligence Committee estimated in 1948 that the Soviets could expand their air force to 20,000 combat planes within six months of mobilization.²⁵

Bloc Forces to Conduct Military Operations against NATO," 12 October 1951, *CIA Research Reports* (Frederick, MD, 1982), microfilm.

23. MC (49) 29th Meeting, 22 June 1949, Minutes of the Western Union Military Committee Meeting, 21 June 1949, DG 1/6/39, p. 113, PRO. For instance, the Europeans and Americans discarded most of their engine-driven vehicles because they deteriorated quickly without regular and expensive maintenance. This led to a comic opera scene in September 1948 when the Western Union was forced to bargain with a Belgian scrap dealer to buy back two hundred Sherman tanks for the French army at what Western military leaders thought was an exorbitant price. Minutes of the first Meeting of the Western Union Ministers of Defense, 27 September 1948, DG 1/5/30, p. 14.

24. This is described in detail in Strategic Intelligence Digest, U.S.S.R., July 1947, Karber Collection; and also in Karber, "The Central European Arms Race," 13.

25. WO 208/411, September 1948, British Intelligence Survey: USSR. Soviet wartime production figure from Cristann Lea Gibson, "Patterns of Demobilization: The US and USSR after World War Two" (Ph.D. diss. University of Denver, 1983), 204. JIC 435/12, 30 November 1948, "Soviet

The Soviets also had plenty of artillery. Because towed artillery did not deteriorate in the way that self-propelled vehicles did, there was every reason to believe that the masses of artillery and mortars employed by the Soviets during World War II were still available to them. Moreover, the Soviets had added to those totals regularly so that by 1950 the Soviets had 128,500 artillery guns on hand. This would have been more than necessary to arm 320 line and reserve divisions and their supporting artillery divisions.²⁶

The Red Army also kept and produced a large number of tanks. British and American intelligence analysts agreed in the late 1940s and early 1950s that the Soviets had been producing at least five hundred tanks and self-propelled guns per month since 1946, more than twice as many as Western analysts estimated would be required to maintain and update the Soviet tank park. The Americans concluded at the outbreak of the Korean War that the Soviets had enough tanks to equip 320 divisions and by 1951 would have enough to keep those 320 divisions in combat for a year.²⁷

A 1953 CIA report admitted that its figures on Soviet tank production between 1946 and 1949 were shaky because the Soviets spent most of that period salvaging and repairing old tanks rather than producing new ones. Nevertheless, even if one discounts the CIA estimate of Soviet tanks in 1948 by half, the Soviets would still have had at least 28,000 tanks, more than enough to equip their 175 active divisions.²⁸ It was also more than enough to equip an invasion of Western Europe. As one American intelligence report of July 1948 pointed out, even though several Soviet divisions in Eastern Europe were cadred with only one-third of their manpower, the Soviets had 1,200 tanks in excess of the

Intentions and Capabilities, 1949, 1956/57," *Records of the U.S. Joint Chiefs of Staff, 1946-1953: Soviet Union*, reel 3, frames 0014-0106.

26. For Soviet use of artillery see Ely, *The Red Army Today*, 3, JIC 530/3, 22 August 1950, "Most Likely Period for Initiation of Hostilities between USSR and Western Powers," *Records of Joint Chiefs of Staff, 1946-1953, Soviet Union*, reel 3, frames 0361-0403. There were fewer than 200 field guns in a Soviet line or artillery division, so 320 line divisions plus some 25 artillery divisions would require fewer than 70,000 field guns. JIC (48)76(0), 21 September 1948, "A Comparison of the Fighting Values of Russian and Allied Forces," *Records of the Joint Chiefs of Staff, 1946-1953: Soviet Union*, reel 3, frames 0000-0014. A later U.S. intelligence research project went back over older studies and data and concluded that the Soviets were producing even more than a thousand artillery guns and mortars per month in the period between 1946 and 1949. Intelligence Research Project, Postwar Soviet Ground Weapons Production, 25 May 1956, Department of the Army, Karber Collection.

27. JIC 80/26, 9 July 1946, Capabilities and Intentions of the USSR in the Postwar Period, RG 237, quoted in Gibson, "Patterns of Demobilization," 202-5. JIC 530/3, 22 August 1950, "Most Likely Period for Initiation of Hostilities between USSR and Western Powers," *Records of Joint Chiefs of Staff, 1946-1953, Soviet Union*, reel 3, frames 0361-0403. The number of tanks necessary to supply 320 divisions was not too many more than that necessary to supply 175 divisions because most clone divisions were rifle divisions without much organic armor.

28. In many cases the rebuilding of tanks had required only a bit of casting and welding, and since transportation was at a premium, the vehicles had been hauled to the nearest metallurgical plant. This had led to many prisoner-of-war reports "listing practically every metallurgical plant in this area as a 'tank plant' and has complicated intelligence treatment of the industry ever since." Provisional Intelligence Report, 27 February 1953, "The Tank and Assault Gun Industry of the USSR," *CIA Research Reports*, 1-12, 42-45.

6,475 tanks required by the full TO/E for all 31 divisions and 3 separate tank regiments stationed there.²⁹

When Stalin blockaded Berlin in 1948, Western intelligence officials had to wonder whether this was a prelude to an invasion of Europe and, if so, whether the Soviets could actually implement their mobilization plan. An Anglo-American Joint Intelligence Committee met to estimate Soviet capabilities and reported in November 1948 that the Soviets could indeed bring all of their 175 divisions to full strength at M+5 and provide the additional 125 to 145 clone reserve divisions by M+30. With that force available, the British and Americans estimated that the Soviets could initially send 50 divisions against Western Europe followed by at least 50 more. This would enable them to conquer Europe to the Pyrenees within two months. At the same time, the Soviets would have enough divisions left over to conquer Italy, Scandinavia, the Balkans, and much of the rest of Eurasia, although not all simultaneously.³⁰

While this estimate was prepared under the auspices of both the American and British Joint Intelligence committees, the British chiefs of staff accepted it with some reservations. They were willing to go along with the estimate as a basis for further planning, they said, but they insisted that “the scale and rate of progress of the various campaigns is probably an over-estimate.” While “little purpose would be served in re-examining them,” they wanted it “made quite clear to all concerned in the use of the Appreciation that it does not take any account of Allied counteraction and represents the maximum possible physical capabilities of the Soviet Union.” The U.S. Joint Intelligence Committee, on the other hand, insisted that it had given consideration to possible Allied counteraction and that it adhered to its estimate that the Soviet Union was capable of the campaigns outlined against Allied forces in being.³¹

While the British did not know it, their caution – to the extent that it was based on doubts about how fast the Soviets could mobilize and deploy an invasion force in 1948 – may have been well taken. According to Nikita

29. Tanks and Armored Cars in the USSR and Occupied Territories, Strategic Intelligence Digest, July 1948, chap. 6, sect. II, 4, a, (3), Karber Collection. These figures might have been the product of direct observation rather than projections based on production figures or Tables of Organization and Equipment. They are quite specific with regard to Europe and the other border military districts that might have been subject to direct observation and counting in tank parks. And although the total estimate is consistent with the overestimated figures in the later CIA tank report (it estimates the total tank inventory of the Soviet Union in mid-1948 as 31,000 without counting assault guns, compared to the later CIA figure of almost 40,000 with assault guns at the end of 1948), it arrives at that figure by assuming that there were over 10,000 tanks in excess of Table of Equipment for the internal military districts, where intelligence was much more difficult to acquire.

30. JIC 435/12, 30 November 1948, Note by the Secretaries to the Joint Intelligence Committee on Soviet Intentions and Capabilities, 1949, 1956/57, *Records of the U.S. Joint Chiefs of Staff, 1946–1953: Soviet Union*, reel 3, frames 0014–0106; FP (48) 49, 6 October 1948, Report by the Chiefs of Staff Committee, DG 1/10/53.

31. JIC 435/12, 30 November 1948, Note by the Secretaries to the Joint Intelligence Committee on Soviet Intentions and Capabilities, 1949, 1956/57, *Records of the U.S. Joint Chiefs of Staff, 1946–1953: Soviet Union*, reel 3, frames 0014–0106.

Khrushchev's speech of January 1960, there had been only 2.87 million rather than 4 million men in the Soviet armed forces in 1948.³² Judged by proportionality, that means there would have been about 1.8 million men in the 1948 Soviet army rather than the 2.5 million men estimated by Western intelligence. If true, the Soviets would have required more time than their mobilization plan prescribed to mount an invasion of Europe because their active divisions would have had less than 70 percent of their manpower.

As noted above, Western intelligence officials and historians have generally concluded that Khrushchev was telling the truth, and this is one of the major factors that has led to the charges of exaggeration and war scare tactics leveled against Western military and political leaders of the early Cold War period. It should be pointed out, however, that while Western estimates included security troops, Khrushchev may not have been counting them. Khrushchev claimed that there were only 11.6, rather than the Western estimate of 12.5, million men in the Soviet armed forces in May 1945. If that figure was the result of not counting the 700,000 Soviet security troops, then perhaps his figure of 2.87 million did not include the 400,000 security troops present in 1948.³³ In that case, the Western overestimate would have been one of only 18 rather than 28 percent.

Meanwhile, what may have been a rather modest overestimate of Soviet capabilities in 1948 soon became a far greater underestimate. In the same 1960 speech in which Khrushchev said that there were 2.86 million men in the Soviet armed forces in 1948, he claimed there were 5.76 million men by 1955. Again, Western intelligence officials have come to agree that Khrushchev's figures were accurate. Presumably, this means that the Soviet army nearly doubled its size to 3.6 million men while still maintaining its 175 active divisions. That was enough to provide a division slice of better than 20,000 men for 175 divisions, 100 percent of wartime TO/E. Yet American and other Western intelligence continued to hold to the figure of 2.5 million men, an error of 69 rather than 28 or 18 percent. Thus, Western analysts missed what was in effect a slow partial mobilization of the entire Soviet active force, one they might well have interpreted as a repetition of the Soviets' pre-1941 "creeping up to war."³⁴

32. Garthoff, "Estimating Soviet Military Force Levels," 93-95.

33. The figures for security troops are given in Strategic Intelligence Digest, U.S.S.R., July 1947, and subsequent orders of battle, Karber Collection.

34. Garthoff, "Estimating Soviet Military Force Levels," 93-95. May, Steinbrenner, and Wolf, whose recently declassified study of the arms race is the most informed of recent discussions of conventional assessments in Europe, speak of this increase and seem to imply that U.S. intelligence knew of it. They say that by mid-1950 the Red Army had perhaps a million more men than in 1948, and U.S. intelligence counted not only a larger number of divisions than in 1948 but twice as many mechanized divisions. They also say that calculations in the late 1950s traced sharp rises in Soviet military manpower beginning at least by the winter of 1948-49. May, Steinbrenner, and Wolf, *History of the Strategic Arms Competition*, 81-82, 251-52. What needs emphasis here is that while U.S. intelligence knew of the overall Soviet manpower increases by 1960, they did not know of them when they were going on. Also, while technically U.S. intelligence was physically counting larger numbers of divisions in mid-1950 than in 1948 through the FPN system, they credited the Soviets with 175 divisions throughout that period.

U.S. intelligence overestimated Soviet capabilities before 1948 and underestimated them afterward for the same reasons: a lag time of a year or more between acquiring the dissonant information and processing an interpretation of it, and the firm belief that the Soviets intended to maintain a fixed figure of 175 divisions and 2.5 million men in the Soviet army as its mobilizable base.

In 1946, for example, three of the four mechanized armies deployed with Soviet forces in East Germany were “cadred” at about one-third of their wartime strength, rather than the expected 70 percent. Each army, then, was the equivalent of only a division. This was significant because these forces represented virtually half of all Soviet tank strength in Germany. American intelligence analysts, not having seen the Soviets use the cadre system in a border area or occupation role, took more than a year to recognize how hollow these formations had become. Once they did notice, they assumed that these formations were being prepared for withdrawal to the Soviet interior.³⁵

The recognition in late 1947 that such a large part of Soviet offensive capability was unprepared for war tended to dampen Western intelligence’s fear of hostile Soviet military behavior during the Czech coup crisis and Berlin blockade of 1948. No doubt that was one of the reasons that the Truman administration, despite its overestimate of the overall size of the Soviet army at the time, did not conclude that the Berlin blockade of June 1948 was the prelude to an immediate invasion.³⁶

Even before the blockade, however, U.S. intelligence analysts had begun to pick up information that they would later realize indicated a turnaround in Soviet military preparation. During the fall of 1947, as Soviet troop levels in Eastern Europe were still declining, the cadred Second Guards Mechanized Army abruptly returned to active status. Not only did it now have 70 percent of its troops, but those troops were sufficiently pretrained that the army could participate in large-scale field exercises.³⁷ Throughout East Germany, the Soviets stopped billeting troops in small dispersed compounds for peacetime policing and began to place their forces in larger garrisons, usually associated with attention to military training. The Soviets tightened border security throughout the zone and returned many civilian dependents to the homeland. They undertook unprecedented division-level training in the winter, performed airborne exercises throughout the forward area, completed motorization for all active units, and increased higher-echelon artillery, air defense, and logistics support. In short, they were converting an occupation command to a military force. Nevertheless, U.S. intelligence remained relatively sanguine.³⁸

35. General Staff, Order of Battle, April 1947, Karber Collection.

36. For the most authoritative demonstration of this see Melvyn P. Leffler, *A Preponderance of Power: National Security, the Truman Administration, and the Cold War* (Stanford, 1992), 218.

37. Order of Battle, November 1947, Karber Collection.

38. Despite the higher manning and levels of activity in two of the six Soviet armies in Germany, U.S. intelligence still categorized them as “cadre.” Order of Battle, April 1948, Karber Collection. Also, U.S. intelligence commented that after maneuvers had been completed, Soviet

All of this took on a different cast on 24 June 1948 when the Soviets not only closed the ground access to Berlin but deployed the forces of the Third Shock and Eighth Guards Armies in combat order. Virtually overnight, with speed, professionalism, and what must have been extensive covert planning and prior preparation, the Soviets had sent eight combat ready divisions to assembly areas on the border. The Soviets now had more ready forces in the area between the Elbe and the inner German border than the West had between them and the Rhine.³⁹ As opposed to 1947, the Soviets could seriously threaten the Rhine on short notice in the event of hostilities. They still had weaknesses in readiness, training, and support that would make problematical an ambitious offensive across the Rhine to conquer all of Western Europe. Consequently, U.S. intelligence estimates at the time of the Berlin crisis remained quite restrained, although, as the Anglo-American Joint Intelligence Committee estimate later in 1948 made clear, the Americans thought the Soviets could conquer all of Western Europe in two months with some time for preparing fifty invasion and fifty follow-up divisions.⁴⁰ More worrisome, in the succeeding few years, U.S. intelligence analysts detected what seemed to be a Soviet attempt to prepare just such a hundred-division invasion capability.

In August 1948, they reported that individual Soviet soldiers were arriving in Germany to reinforce existing units while dependents had moved out.

occupation units had assembled into larger garrisons for the winter and that this had "created an impression of increased strength which was more apparent than real. Although there have been indications that a considerable turnover of troops has been effected between Germany and the USSR, it is not believed that the Soviet occupation forces have been increased." Meanwhile, the U.S. intelligence analysts took calmly the fact that the Soviet Seventieth Army, earlier withdrawn to the Soviet interior, returned to northwestern Poland in early 1948 with the presumed mission of securing the Baltic coast. When it returned, its draft animals and cavalry had been replaced with a fully motorized rifle corps and a tank division, units that could easily compensate for the missing formations in some of the cadred armies forward in East Germany. Moreover, the Seventh Mechanized Army appeared in southwestern Poland with one mechanized and two tank divisions. Order of Battle, February 1948, Karber Collection.

39. For locations and force comparisons see Karber, "Central European Arms Race." It is interesting that when the Soviets published their 1946–1948 operational plan referred to in footnote 6, they stressed that the assignment of their forces east of the Elbe demonstrated their defensive intent. Indeed, it was the violation of this self-restraint and the massing of the first-echelon armies west of the Elbe that put fear into Western planning.

40. The June order of battle analysis stated: "The coincidence of extensive maneuvers with the recent Berlin 'crisis' has had the effect of producing a flood of reports and rumors, many of which have suggested a considerable military build-up in the Soviet Zone and some of which have described even more active preparations for an offensive against the Western Powers. It is not known whether this timing was by accident or design, but the fact that troops have moved to maneuver areas prior to and during a period of extreme local political tension has undoubtedly had the result of giving rise to many of the exaggerated reports which have been received. There is always the possibility that the Soviets have in fact built up their forces under cover of maneuvers and the general atmosphere of tension, but so far there has been insufficient evidence to confirm any such build-up. No new important unit identifications have been made in Germany, and it appears that during this period Soviet movement through Poland and the Baltic ports has continued at a normal rate. Reports of movement through Czechoslovakia into Germany have been received but are unconfirmed. . . . While it is possible that some overall increase may have occurred, the evidence to show its extent and distribution is tenuous and insufficient to justify an actual change in the estimated total." Order of Battle, June 1948, Karber Collection.

Between October 1948 and May 1949, American analysts reported that the number of men in Soviet divisions in Germany had increased by 65,000 and that all of the mechanized divisions cadred at one-third strength had been brought up to their peacetime strength of 70 percent of their manpower. They thought that this was intended to permit Soviet units to operate at maximum efficiency during maneuvers, but these analysts pointed out that it also increased Soviet capability for a rapid commencement of hostilities. In 1949, American intelligence analysts further reported that the Soviets had decided to keep the 1947 draft cohort of men for an extra year rather than discharging it in two years, as was usual. Since the 1949 cohort would be drafted regardless, this meant a potential increase in the size of the Soviet army by one-third. By February 1950, then, the Joint Chiefs warned the American government that the Soviets could invade Europe from a standing start.⁴¹

And still the buildup continued. Over the next two years, American analysts reported that the Soviets had brought their divisions in Austria up to 70 percent strength, that ten armies (composed of some forty divisions) were deployed along the Soviet border with Poland for immediate support of the forward force, and that housing for thousands of new troops was being built in East Germany and filled with trained troops rather than the usual raw recruits. American analysts concluded that with reinforcements to bring all forces in Eastern Europe and the Western districts to wartime TO/E, the Soviets could launch an attack of 103 divisions against Western Europe. Such reinforcement seemed to be taking place in Eastern Europe, at least, for in April 1952 American analysts rated all divisions in Germany at 95 percent of TO/E, including their full complement of battalions and other subordinate units.⁴²

Accompanying this buildup of Soviet forces in Eastern Europe were maneuvers on a larger and larger scale, an obvious sign of increased preparedness. In January 1950, American intelligence warned that Soviet maneuvers during the previous year, which analysts thought had terminated as usual at the regimental level, had actually been at least division-sized maneuvers, the first high-level maneuvers reported since 1947.⁴³

Despite the buildup and increased preparedness detected by American intelligence analysts in Europe, these analysts did not assume that such changes implied a buildup in Soviet forces overall. If the analysts added troops to the estimate of forces in Europe, they deducted the same number of troops from the Soviet interior and vice versa, all the while asserting that there was no reason to believe that there had been any change in the overall strength of the Soviet army, "which continues to be estimated at 2.5 million."⁴⁴

41. Orders of Battle, August 1948 and May 1949, Karber Collection. Minutes of Policy Planning Staff meeting, 2 February 1950, *Foreign Relations of the United States, 1950* (Washington, 1977), 1:142-43.

42. Orders of Battle, March 1950 through October 1951 and April 1952, Karber Collection.

43. Order of Battle, January 1950, Karber Collection.

44. In addition to the orders of battle and reports from the U.S. Embassy in Moscow listed in previous footnotes see "Worldwide Military Situation Report," 30 August 1951, *Records of the Joint*

Apparently they stuck to that figure because they had it from an authoritative source that 2.5 million was the Soviet active manpower goal, and such a hard figure was difficult to dislodge with discrete, confusing, and often changing detail. Besides, even with the FPN system, they did not have very detailed information about the Soviet interior and thus could believe that whatever changes might be taking place in Europe were being offset by changes in the interior.⁴⁵ Moreover, American analysts had great and justified confidence in their figure of 175 divisions and, given their near-reverence for Soviet mobilization plans and capabilities, some reason to assume that the Soviets would not incur the vast expense of building those divisions beyond the 2.5 million and 70 percent manning level because they did not need to.

Meanwhile, American analysts fully recognized the increasing threat to Western Europe because they were watching the buildup of the satellite armies as well as Soviet armed forces. In 1948, the Anglo-American joint estimate counted "approximately 90 European Satellite divisions," of which it said only the thirty Yugoslav divisions (and the Polish air force) were effective combat forces. The remainder were poorly equipped, had very low morale, and could not be relied on for any critical operation. The Anglo-American estimators assumed that most satellite divisions would be used for occupation duties and to guard lines of communication.⁴⁶

American analysts noticed a continuing increase and improvement of the satellite forces in the years following 1948, although this was to some extent offset by the loss of the Yugoslavs when Tito broke with Stalin. In 1951, the U.S. embassy in Moscow said that satellite armies had increased from about 1.3 million to 1.7 million men during the previous year. In addition, those armies had received many tanks, trucks, and artillery pieces, enabling them to increase the number of their divisions from fifty-five to sixty. A year later, a National Intelligence Estimate counted sixty-eight satellite line divisions and estimated

Chiefs of Staff, 1946–1953: Europe and NATO, reel 4, frames 0572–86. Special Estimate, "The Strength and Capabilities of Soviet Bloc Forces to Conduct Military Operations against NATO," 12 October 1951, *CLA Research Reports*; National Intelligence Estimate, "Soviet Bloc Capabilities, through Mid-1953," 12 November 1952, *CLA Research Reports*; Order of Battle, April 1951, Karber Collection. Enclosure Despatch 514, 25 April 1950, Soviet Intentions, Prepared by Joint Intelligence Committee, American Embassy, Moscow, RG 59, General Records of the Department of State, Records of the Policy Planning Staff, 1947–1953, box 23, USSR 1946–1950.

45. The FPN system, for instance, theoretically could have provided evidence of the manning and readiness of all Soviet divisions because the use of the FPNs of all of a division's subordinate units would indicate that the division was at or near full strength, while the absence of them might mean that those units were missing and the division was at reduced strength. But it was far easier to identify smaller units in nearby Eastern Europe than in the Soviet Union itself. Thus, Foreign Orders of Battle in the early 1950s often showed the Soviet divisions stationed in Eastern Europe with FPNs and identification for most or all of the regiments in that division, but interior divisions were often listed with the FPN of the division only. This allowed American intelligence to assume that if units in Eastern Europe were building up, those in the interior must have been declining in compensation.

46. JIC 435/12, 30 November 1948, "Soviet Intentions and Capabilities, 1949, 1956/7," *Records of the Joint Chiefs of Staff, 1946–1953: Soviet Union*, reel 3, frames 0014–0106.

that there would be ninety-four divisions by mid-1953, along with the possibility that East Germany would form divisions from its "people's police." By November 1952, the CIA reported that all satellite divisions were well armed with Soviet World War II equipment, but few were motorized or mechanized, and all remained dependent on the Soviet Union for logistical support. While the CIA expected the satellite armies to continue to improve somewhat, it still rated them only fair in combat effectiveness and reliability.⁴⁷

So, although American analysts in 1952 thought the satellite divisions constituted a substantial and growing addition to Soviet military strength in Europe, they did not think that these units would participate directly in an attack on Western Europe until 1956. They thought that from 1956 on, twenty to twenty-five satellite divisions might take part, but none would act independently and most would still be used to guard the Soviet lines of communications. The American analysts based this projection on the existing rate of military development in the satellites, which would bring Bulgaria to an optimum readiness during 1953, Romania by late 1955, and Albania, Czechoslovakia, East Germany, Hungary, and Poland by late 1954.⁴⁸

Thus, while there may have been some overestimates in Western intelligence accounts of Soviet conventional capabilities in the early Cold War years, the fact that American and other military analysts underestimated those capabilities after 1948, that they did not extrapolate an overall increase in Soviet forces from their information on increases in other areas, that they downgraded the effectiveness of satellite units, and that they constantly made new additions *and subtractions* to their orders of battle indicates that critics have been wrong to characterize Western military estimates of Soviet conventional capabilities as deliberate exaggerations. One cannot read the compilations of orders of battle, analyses of Field Post Numbers, unit sightings, and analyses without being impressed by the seriousness of the analysts and their willingness to correct their errors.

The test of the first Soviet atomic bomb in August 1949 did not lead the Truman administration to believe it likely that the Soviets would now use their

47. Enclosure Despatch 626, 25 April 1951, Soviet Intentions, Prepared by the Joint Intelligence Committee, American Embassy, Moscow, RG 59, Records of the Policy Planning Staff, 1947-1953, box 23, USSR, 1951-1952. National Intelligence Estimate, "Soviet Bloc Capabilities, Through mid-1953," 12 November 1952, *CIA Research Reports*. The estimate of East German forces turned out to be an overestimate. A 1956 estimate of satellite forces counted seventy-five divisions and noted that the East German forces of one hundred thousand men were still awaiting organization into divisions, perhaps because the East German uprising of 1953 cast doubt about the loyalty of those forces. JIC 558/392, 6 February 1956, Intelligence Estimate of Soviet Bloc Capabilities, RG 218, U.S. Joint Chiefs of Staff, Central Decimal File, 1954-1956, 334 JIC (2-28-55).

48. National Intelligence Estimate, "Soviet Bloc Capabilities, Through mid-1953," 12 November 1952, *CIA Research Reports*; JIC 558/159, 2 September 1952, Intelligence Estimate of the Strength and Capabilities of the Soviet Bloc, 1953-1956, RG 218, U.S. Joint Chiefs of Staff, Geographic File, 1951-1953, 092 Western Europe (3-12-48), sect. 174. Project 7244, U.S. Department of the Army, 19 September 1952, Development and Probable Deployment of the European Satellite Armies, Karber Collection.

conventional superiority to invade Europe. Truman's administration did worry, however, that once the Soviets built a few hundred atomic bombs, they might put pressure on Europe with their immense conventional forces in the belief that the Americans would now be reluctant to risk responding to conventional aggression with nuclear weapons. Therefore, under the policies outlined in NSC-68, the United States and its European Allies began a major conventional buildup, including the stationing of six U.S. divisions in Germany, to balance Soviet forces aimed at Western Europe.⁴⁹

Of course, the West calibrated its own buildup to the size of the enemy forces it expected to meet and the speed with which those troops could be mobilized and deployed. Western intelligence estimators always offered a range of possible Soviet forces that might arrive in each successive wave of a Western Europe invasion, depending on the time the Soviets would have for mobilization. Most of the plans discussed below assumed that if the war came with a short warning, the first wave of Soviet troops would consist of between twenty-five and forty divisions. This would have meant the inclusion of the twenty-four to twenty-five Soviet divisions in East Germany and Poland (depending on the date of the plan) to spearhead the attack, perhaps to be joined by the five or six divisions located in the remainder of Eastern Europe and the ten most ready of the thirty-nine divisions poised on the Polish border in the Baltic, Belorussian, and Carpathian military districts of the Soviet Union. By M+30, Western military planners expected up to seventy to seventy-five divisions to have moved into Eastern Europe in several echelons. These divisions would be drawn from the remainder of the divisions on the Polish border. With longer warning, Western planners expected the Soviets to send well over a hundred divisions by M+30.⁵⁰

Whatever the size of the Soviet army and the manning level of its 175 active divisions at a given time, it was clear that if the Soviets deliberately planned an invasion and mobilized their forces to confront Western Europe with more than a hundred divisions in thirty days, the West would have to raise immense and expensive conventional forces of its own or else rely on immediate use of nuclear weapons to deter or defend against the invasion. Robert McNamara later decided that the short warning threat of seventy or fewer divisions was more likely, that the West could afford to arm conventionally against that threat

49. After the Soviets exploded their atomic bomb in 1949, the West apparently overestimated the rate of Soviet acquisition of nuclear weapons just as they had Soviet conventional capabilities in 1948. See Samuel F. Wells, "Sounding the Tocsin: NSC 68 and the Soviet Threat," *International Security* 4 (Fall 1979): 116–48. Once again it is not clear how significant this overestimate was for Western military planning, because the fact that it might take one or two years longer before the Soviets acquired as many atomic bombs as Western intelligence thought would be of little consolation to military planners. For some discussion of this issue see Combs, "George Kennan, Paul Nitze, and the Issue of Conventional Deterrence in Europe," 370–77.

50. Behind all of this would come the clone divisions, but Western intelligence did not worry too much about them. Clone divisions would be slower to mobilize and were too poorly equipped to do much more than serve as replacement divisions. Besides, the central front was only wide enough to accommodate about fifty Soviet divisions at a time.

where it could not do so against the hundred division threat, and that by doing so NATO could avoid early use of nuclear weapons. In their recently declassified history of the strategic arms race, Ernest May, John Steinbrenner, and Thomas Wolf have regretted that the United States and NATO did not adopt that policy earlier.⁵¹ But the West did not have the forces to defend against even the short warning threat until 1963, and given the size of the Soviet threat oriented toward Western Europe in the 1950s, NATO did not consider planning for such a defense in the future either. This determination of Western leaders in the 1950s to arm against the 100 to 140 division threat was far more important than any misestimates of the size of the Soviet active army in determining the magnitude of the Western buildup called for in U.S. and NATO war plans of the time.

While it was clear in 1948 that it would have taken the Soviets at least a couple of months to mobilize and prepare the fifty division invasion of Western Europe visualized in the Anglo-American Joint Estimate of November 1948, it would have taken the West far longer to prepare an adequate defense because its troops were not armed or organized for war. Therefore, the Americans planned a quick retreat of their occupation forces in Germany and then evacuation of them from the Continent. By 1949, however, the Americans had agreed to let their occupation troops in Germany, composed of approximately two division equivalents, fight alongside the forces of the newly formed Western Union and at least try to delay the invasion.⁵²

In March 1949, Field Marshal Bernard Montgomery, the head of the Western Union military force, put together the emergency plan under which the Western Allies would fight. Since he had only ten divisions plus a few independent regiments and brigades (including the American troops), he made plans to deal with just the twenty-five Soviet divisions in East Germany and Poland. He would stand on the Rhine after a fighting retreat from Germany, but he made clear he would have difficulty stopping even twenty-five divisions, let alone the many more that were sure to follow.⁵³

At the same time Montgomery proposed his emergency plan, he also formulated a Medium Term Plan to defend the Rhine against a full-scale invasion by 1954. He estimated that by 1954 the initial wave of the Soviet invasion would include not only the twenty-five divisions in eastern Germany and Poland but fifteen more divisions from Eastern Europe and the western Soviet Union. Within twenty days after the invasion (D-Day + 20) he expected the

51. May, Steinbrenner, and Wolf, *History of the Strategic Arms Competition*, 57.

52. Nigel Hamilton, *Monty: The Field Marshall, 1944-1976* (London, 1986), 698-705; Richard A. Best, "Cooperation with Like-Minded Peoples": *British Influences in American Security Policy, 1945-1949* (New York, 1986), 163-65, 178-81, 366-69; Kenneth W. Condit, *History of the Joint Chiefs of Staff: The Joint Chiefs of Staff and National Policy. Volume II, 1947-1949* (Wilmington, DE, 1979), 295.

53. MC (49) First Meeting, Chiefs of Staff Committee of the Western Union, 24 March 1949, DG 1/6/36; MC (49) 20, 23 November 1949, DG 1/5/34, p. 5; FC (48) 23, 7 January 1949, Report by Chiefs of Staff Committee, DG 1/10/43; MD (50) 1st Meeting, Western Union Defence Committee, 5 September 1950, DG 1/5/35, pp. 10-13; Condit, *History of the Joint Chiefs of Staff, 1947-1949*, 372-73.

Soviets to have eighty-eight divisions in action and possibly as many as a hundred. To deter or defend against this invasion force, Montgomery wanted eighteen divisions to cover the retreat to the Rhine and thirty-eight more to meet him when he got there:

Western Union MTDP (March 1949)⁵⁴
(for defense of the Rhine in 1954)

Divisions	Soviet	Western Union
D-Day	40	18
D+3		34
D+10-D+20	88-100	56

When NATO took over the defense of Europe from the Western Union in 1950, the Western Union remained the planning group for the Central or Rhine Front and adopted Montgomery's plan almost unchanged.⁵⁵ Just as NATO was accepting its planning group's recommendation, the Korean War broke out and the U.S. chairman of the Joint Chiefs, General Omar Bradley, seems to have intervened to add four more divisions to Montgomery's D+90 forces.

DC (Defense Committee) - 28 (October 1950)⁵⁶
(NATO requirements for defense of the Rhine in 1954)

Divisions	Soviet	NATO
D-Day	40	32
D+30	75-100	56
D+90	75-100	60

54. MD (49) 7, 28 March 1949, Report by Military Supply Board and Western Union Chiefs of Staff Committee, DG 1/10/54, p. 259.

55. NATO did not adopt the Western Union plan before there was a renewal of the Anglo-American controversy over Soviet mobilization capabilities, however. In May 1950, just before the invasion of South Korea, but after the Soviets had substantially built up their ready forces, Field Marshal Montgomery told the senior officers of the Western Union that it would be M+90 rather than M+30 before the Soviets could bring their 175 line divisions up to 320 divisions. Hamilton, *Monty*, 762. Thus, the British argued that the Soviets would need two months to build up their forces for an attack on Western Europe and that the West would know of the mobilization within three to five days of its commencement. The U.S. Joint Intelligence Committee protested that Soviet forces by this time were balanced and ready to invade the West without prior warning. Ultimately the British and Americans agreed on an estimate that in 1950 the Soviets could invade without warning with their twenty-five divisions in East Germany and Poland and could build that force rapidly to about seventy-five to ninety divisions. WAR (G2) to JMAG, 8 November 1950, RG 334, Records of the Secretary of Defense, folder 6, July-December 1950, National Archives.

56. JCS 2073/201, 7 September 1951, Closing the Gap, RG 218, U.S. Joint Chiefs of Staff, Geographic File, 092 Western Europe (3-12-48), sect. 93; Walter S. Poole, *The History of the Joint Chiefs of Staff: Volume IV, The Joint Chiefs and National Policy, 1950-1952* (Wilmington, DE, 1980), 244-46. JSPC 876/331, 6 July 1951, Closing the Gap, *Records of the Joint Chiefs of Staff, 1946-1953: Europe and NATO*, reel 6, frames 0354-75. These figures assume that the division totals quoted in these sources omit the six brigades that Montgomery counted as two divisions to bring his division total on the Rhine at D+30 to fifty-six divisions.

It should be clear from these plans that Western military leaders were not demanding a number of divisions equal to those in the projected Soviet force and, contrary to their critics, were indeed counting Western divisions as superior to their Soviet counterparts. The Western Union based its plans on the assumption that three Western divisions were about equivalent to four Soviet divisions.⁵⁷ American planners refused to accept the Western Union figures, but their own calculations were not all that different. They asserted that American and British divisions were superior in firepower to Soviet divisions by about a 3:2 margin, but this ignored the smaller French and ultimately German divisions, which, when added to the NATO mix, must have pushed their own figures back toward the Western Union 4:3 ratio. By 1951, NATO seems to have modified this firepower ratio by adding credit for the greater logistical capabilities of Western divisions. Alfred Gruenther, Eisenhower's deputy as Supreme Allied Commander, said that NATO divisions were superior to Soviet divisions by about a 3:2 margin.⁵⁸ And one can see from the plans of the Western Union and NATO summarized above that they were asking for only a few more than half of the maximum number of divisions they expected the Soviets to send against them.

Critics might complain, however, that the West was still not giving adequate credit to NATO forces for the advantages they would have for being on the defensive. Many commentators have pointed out that defenders have something like a 3:1 advantage over troops that must expose themselves in order to attack.⁵⁹ Supposedly, then, Western divisions, which were already superior by a 3:2 margin over comparable Soviet divisions, should have been superior by a 9:2 margin as defenders against an attack by Soviet divisions.

Unfortunately, that is a misconception. Military commanders seek a 3:1 superiority for an attacking force *only at the point of attack*, not all across the line of combat. The attacker can accept a 1:1 ratio or even less along the entire line to prevent a successful counterattack while concentrating its forces to achieve ratios of 3:1 or higher against a few of the defender's division or corps sectors to achieve a breakthrough. In recent times, NATO worked on the assumption that an attacking force required a 1-1.5:1 ratio in the overall theater and 3:1 or better at the point of attack to have a good chance of success. Soviet military manuals called for an even more decisive superiority at the point of attack – 3-5:1 in

57. For statements to the contrary see Evangelista, "Stalin's Postwar Army Reappraised," 117; and Enthoven and Smith, *How Much Is Enough?* 136. JIC (48) 76 (o), A Comparison of the Fighting Values of Russian and Allied Forces, 21 September 1948, *Records of the Joint Chiefs of Staff, 1946-1953: Soviet Union*, reel 3, frames 0000-0014.

58. JLP 84/32/D, 19 October 1948, Enclosure, Joint Outline Plan for War against the USSR in 1956, RG 218, U.S. Joint Chiefs of Staff, Geographic File, 1948-1950, 092 USSR (3-27-45), sect. 22. Gruenther used the 3:2 ratio when explaining the comparative size of NATO and Soviet divisions, although he said that Soviet divisions had almost equal firepower to Western divisions while Western divisions had more "sustainability." U.S. Delegation at Eighth Session of North Atlantic Council to Acting Secretary of State, 27 November 1951, *FRUS, 1951* 3:731.

59. Evangelista, "Stalin's Postwar Army Reappraised," 119.

infantry, 6 – 8:1 in artillery, 3 – 4:1 for tanks and self-propelled artillery, and 5 – 10:1 in aircraft.⁶⁰

Assuming, then, that the West had enough troops to cover the entire defense line and had fortified that line so that the enemy would have to concentrate its forces to break through rather than just drive through an undefended gap, what force ratio could the Western Union and NATO have accepted along the entire line to enable them to defend against a Soviet attack? A Congressional Budget Office study in 1980 stated that the West could maintain an elastic defense if the ratio of Soviet to Western theater forces was held to less than 1.4:1 and that the West could maintain a steadfast defense on the line if it could reduce the Soviet advantage to 1.2:1.⁶¹ If one takes the 3:2 ratio, by which Western divisions were superior to their Soviet counterparts, and multiplies the Western advantage by 1.2, the result is just about the ratio of forces that NATO commanders asked to meet the maximum number of Soviet divisions they expected to confront.

When Dwight Eisenhower assumed command of NATO forces in 1951 and formulated a new plan to defend forward of the Rhine in Germany, he continued to accept that balance of forces, seeking a few more than half of the maximum number of Soviet divisions that might arrive on his front within a given period of time. Because he expected a larger Soviet force to arrive more quickly on his forward defense lines than they would have on the Rhine, he demanded a larger force than his predecessors.

MC-26/1 (October, 1951)⁶²
(NATO requirements for defense forward of the Rhine in 1954)

Divisions	Soviet	NATO
M-Day	40 ²	31
M+30	70–120	65
M+90	70–120	85–95

Eisenhower's requirements proved economically and politically impossible to reach, even after NATO reduced some of them when it adopted the Lisbon Goals in 1952.⁶³ Consequently, when Eisenhower became president, he decided

60. Each side based these ratios on its own experience in the campaign against the Germans in World War II. Richard Ned Lebow, "The Soviet Offensive in Europe: The Schlieffen Plan Revisited?" *International Security* 9 (Spring 1985): 48–52.

61. William P. Mako, *U.S. Ground Forces and the Defense of Central Europe* (Washington, 1983), 38.

62. U.S. Delegation at Eighth Session of North Atlantic Council to Acting Secretary of State, 27 November 1951, *FRUS, 1951* 3:730–31; Summary of the Temporary Council Committee Report [17 December 1951], *ibid.*, 385–90; JCS 2073/201, 7 September 1951, Closing the Gap, RG 218, U.S. Joint Chiefs of Staff, Geographic File, 092 Western Europe (3-12-48), sect. 93; Robert J. Watson, *History of the Joint Chiefs of Staff: Volume V, The Joint Chiefs of Staff and National Policy, 1953–1954* (Washington, 1986), 282.

63. The Lisbon Goals eliminated the twenty to thirty divisions Eisenhower had required for M+90 on the Central Front and reduced many other of Eisenhower's requests. JIC 490/30, 20 May 1952, Proposed Revision of SGM 874/52, RG 218, U.S. Joint Chiefs of Staff, Geographic File, 1951–1953, 092 Western Europe (3-1-48), sect. 146; Poole, *History of the Joint Chiefs of Staff, 1950–1952*, 293.

to make up for the West's conventional inferiority with nuclear weapons in what came to be known as the policy of massive retaliation.

At the time Eisenhower took office in 1953, the four U.S. divisions that Truman had ordered to join America's two occupation divisions in Europe had finally arrived, bringing NATO forces on the Central Front to 18 $\frac{2}{3}$ M-Day divisions and 33 M+30 divisions. This force was so clearly inferior to the Soviet divisions oriented toward Europe that it is easy to see why Eisenhower felt he had to rely on the immediate use of nuclear weapons to defend NATO in case of a Soviet conventional invasion. And while NATO added some five more M+30 divisions over the next few years, the withdrawal of French divisions to Algeria and other obstacles made it impossible to increase the M-Day divisions beyond 18 $\frac{2}{3}$ until the very end of the Eisenhower administration, when the West Germans began to bring on line the twelve divisions they had pledged to NATO earlier in the 1950s.⁶⁴

Even with the anticipation of having all twelve West German divisions, the Eisenhower administration and NATO still assumed that they would have to make early use of nuclear weapons to stop a Soviet invasion. The first plan they adopted, which mistakenly expected all twelve West German divisions by 1957, placed the bulk of NATO forces on the forward defense line formed by the Wesser, Fulda, and Lech rivers. The primary mission of these forces and the few screening forces between that line and the East German/West German border was not so much to stop any Soviet invasion but to force the Soviets to concentrate their forces to break through and thus provide lucrative targets for NATO nuclear weapons. The requirements for the plan were as follows:

MC-48 Requirements for 1957 (Adopted December 1954)⁶⁵

Divisions	Soviet	NATO
M-Day	40 ²	3 ¹
M+30	70-140	53 $\frac{1}{3}$
(includes 20 satellite divisions)		
NATO atomic delivery systems other than aircraft		200
Atomic warheads assigned to NATO targets		1,700
(Note: No planning for D+90 in an atomic environment.)		

64. JCS 2073/336, 14 April 1952, Allocation of NATO Forces, *Records of the Joint Chiefs of Staff, 1946-1953, Europe and NATO*, reel 7, frames 0542-50. Review of the Mutual Defense Assistance Program on a Country by Country Basis (European Area), 1 September 1954, RG 330, 091.3 MDAP, box 19 (listed as Current JCS Force Basis); also Watson, *History of the Joint Chiefs of Staff, 1953-1954*, 319.

65. Derived from Review of the Mutual Defense Assistance Program on a Country by Country Basis (European Area), 1 September 1954, RG 330, 091.3 MDAP, box 19 (listed as Current JCS Force Basis); JP (56) 120 (final), 27 June 1956, NATO Strategy and Level of Forces, DEFE 4/88; Condit, *History of the Joint Chiefs of Staff, 1955-1956*, 132-44; Watson, *History of the Joint Chiefs of Staff, 1953-1954*, 282, 300, 319; Robert Kleiman, "First Blueprint for Atomic War," *U.S. News and World Report*, 25 February 1955.

We still have very little information about the successor plan they adopted in 1958, MC-70, but it looked approximately like this:

MC-70 Requirements for 1963 (Adopted Spring 1958)⁶⁶

Divisions	Soviet		NATO
	No prior mobilization	With 90 days mobilization	
D-Day	24	up to 100	30
D+30	65-75	130-140 (not including satellite)	53 1/3 ²
NATO atomic warheads			3,500 ²

MC-70 did move slightly away from massive retaliation by seeking to have its forces impose a “pause” on an enemy attack before resorting to nuclear weapons. But that pause referred only to minor instances such as infiltrations, incursions, and hostile local actions, not significant invasions.⁶⁷ And indeed, if the Soviets had sent up to 100 D-Day divisions and 140 D+30 divisions, the 30 to 31 NATO D-Day divisions and 53.33 NATO D+30 divisions would have been far inferior to the enemy, even allowing for the superiority of Western divisions and the advantages of the defense.

Alain Enthoven, assistant secretary of defense for systems analysis under Robert McNamara, argued in a 1971 book that by exposing the exaggerations of the Western military planners, McNamara and the Kennedy administration were able to show that with only minor improvements in NATO forces they could achieve a robust conventional defense that would remove the need for early first use of nuclear weapons and perhaps for any first use of nuclear weapons at all. In fact, as noted above, he claimed that NATO might have been able to have a conventional option “all along.”⁶⁸

While there were indeed some American intelligence overestimates of Soviet capabilities after 1955, as Enthoven implies, he did not make clear that there were three developments that made it far easier to conceive of and adopt the conventional option and “No Early First Use” than had been the case in the 1950s. First, the Soviets had reduced their conventional forces in Europe and elsewhere starting in 1956. Second, the West Germans were finally completing

66. Norstad testimony to executive session of U.S. Senate, 26 March 1958, U.S. Congress, *Executive Sessions of the Senate Foreign Relations Committee (Historical Series)*, 85th Cong., 2d sess. (Washington, 1980), 10:158-59; Norstad testimony on Mutual Security Act of 1959, House Foreign Affairs Committee, 86th Cong., 3:448-49; David Schwartz, *NATO's Nuclear Dilemmas* (Washington, 1983), 141; JIC 558/392, 6 February 1956, Intelligence Estimate of Soviet Bloc Capabilities and Probable Courses of Action in the Event of War between Now and the End of 1960, RG 218, Central Decimal File, 1954-1956, 334 JIC (2-28-55).

67. JCS 2073/1545, 26 March 1958, Memorandum by the Chairman of the Joint Chiefs of Staff on the Nineteenth Session of the NATO Military Committee, 13-14 March 1958, RG 218, Geographic File, 1958, 092 Western Europe (3-12-48) (2), sect. 102.

68. Enthoven and Smith, *How Much Is Enough?* 140-41.

the formation of the twelve divisions they had been promising NATO since the mid-1950s. And third, McNamara decided that the most likely threat posed by the Soviets was an attack that emerged out of a local crisis for which the Soviet army had not mobilized. Therefore, the West could afford to arm against a lesser threat rather than an all-out invasion.

In Khrushchev's speech of 1960, the Soviet premier had claimed that he had reduced Soviet armed forces personnel to 3,600,000 men between 1955 and 1960. He had actually been announcing reductions totaling close to two million men over the previous four years, and some of the NATO allies had seen these reductions as reasons for lessening the size and costs of the planned NATO buildup.⁶⁹ But until 1960, Khrushchev did not reveal that he was making those cuts from a base of 5.76 million rather than from the West's estimate of 4 million men. American military intelligence analysts tried to work out several scenarios but were unable to see how the Soviets could make their announced cuts from the estimated base of 4 million men without gutting their military entirely (these scenarios included reductions of divisions to 140 and cadreing half of those). They even considered the possibility that their manpower estimates had been wrong. But because Khrushchev's figures on manpower and division reductions did not make sense and because the Soviets were compensating for any possible manpower cuts by modernizing their forces, U.S. and NATO military planners refused to reduce their own requirements in the late 1950s.⁷⁰

In 1960, however, Raymond Garthoff led an intelligence study of Khrushchev's speech that seemed to confirm the accuracy of Khrushchev's figures. Garthoff concluded that about one hundred of the Soviet divisions were now at the peacetime 60 to 80 percent strength while the remainder were cadred. By 1961, the Soviet army had actually cut its 175 divisions to about 140, more than half of which were at reduced strength. And by January 1962, the Soviets were down to sixty-five combat ready and sixty cadre divisions. At the same

69. Khrushchev had announced a first reduction of 640,000 men in 1955. In 1956 he announced another reduction to take effect by May 1957 of 1.2 million men composed of sixty-three divisions and brigades, including three air divisions and thirty thousand troops from East Germany. JIC 531/57/7, Report by the Joint Intelligence Group to the Joint Intelligence Committee on the Effect of Reductions in the Soviet Armed Forces, 15 May 1956, Karber Collection.

70. As one intelligence official put it, "there are indications that our past assessments of Soviet military personnel strength may have been too low; and specifically that these levels were considerably higher during the period of the Korean War than we then estimated." Memorandum for Assistant to the Secretary of Defense (Special Operations), Estimate of Soviet Military Threat, from Rear Admiral Edwin T. Layton, Deputy Director for Intelligence, Joint Staff, 15 June 1956, Karber Collection. They also saw that there might have been times that Soviet levels were lower than estimated. "There have been some indications of a personnel, not unit, reduction in 1953 and 1954 but these indications were not firm. It is possible that there was a reduction in 1953 and 1954 following the reported influx of men into the Soviet services in 1949 and 1951. Since intelligence on actual personnel strengths was insufficient to determine the magnitude of these increases and decreases, no modifications in personnel estimates were made to reflect these changes." JIC 531/571/7, Report by the Joint Intelligence Group to the Joint Intelligence Committee on the Effect of Reductions in the Soviet Armed Forces, 25 May 1956, p. 5, Karber Collection.

time, of course, the Soviets were building their atomic capabilities, including the tactical nuclear capabilities of their ground forces. Moreover, they were increasing some aspects of their conventional strength in Eastern Europe by converting two mechanized divisions to tank divisions and four rifle divisions to mechanized divisions.⁷¹ Nevertheless, if the object of NATO was to limit the chances of nuclear war by creating the capability to deal with Soviet conventional forces without early resort to NATO nuclear arms, then those chances were clearly improved.

Even more important than the decline of Soviet forces at this time was the increase in NATO forces. West Germany completed the buildup of its twelve divisions in 1963, bringing NATO's total D-Day divisions to twenty-six. The buildup of NATO forces was more important than the build-down of Soviet forces because of the Force to Space ratio.⁷² If NATO did not have enough divisions to cover the four hundred mile Central Front from the North Sea to the Alps, an attacking force, even an inferior one, might have the advantage because it could strike through gaps in the line and penetrate deep into the heart of Europe. But if NATO could cover the line, it might defend against a considerably larger attacking force because the space available allowed only a limited number of Soviet divisions – perhaps 40 to 50 out of the maximum estimated Soviet force of 140 divisions – to be on the line at any one time.

With NATO's divisions being larger than Soviet divisions, Robert McNamara thought that NATO's force of twenty-six divisions (including the West Germans) should be able to cover the Central Front line and defend against a major Soviet conventional invasion for at least a reasonable period without resorting to nuclear weapons. McNamara calculated such a major confrontation as follows:⁷³

Divisions	Soviets	NATO
M-Day	20–36	26
M+30	50–60	41
M+180	95–105	?
(60–70 Soviet divisions and 35 satellite divisions)		

71. Garthoff, "Estimating Soviet Military Force Levels," 94–96, 102; Robert R. Bowie, *The North Atlantic Nations, Tasks for the 1960s: A Report to the Secretary of State, August, 1960* (College Park, MD, 1991), 45–47. This reorganization is discussed in Karber, "The Central European Arms Race," 47.

72. B. H. Liddell Hart, *Deterrent or Defense: A Fresh Look at the West's Military Position* (New York, 1960).

73. Robert McNamara, Draft Presidential Memorandum, 21 September 1966, NATO Strategy and Force Structure, National Security Archive (hereafter NSA), 13. McNamara, Draft Presidential Memorandum, 24 October 1964 and 15 January 1965, The Role of Tactical Nuclear Forces in NATO Strategy, pp. 30–31. There is an actual comparative chart included in this memorandum, but it is almost entirely censored. Jerald A. Combs put these figures together from other information on the periphery of the chart. The authors received personal copies of many of these draft memoranda courtesy of Jane Stromseth.

These projections made it seem quite possible that NATO could defend against a major Soviet invasion by 1963. Not only did NATO have superior tactical air support, but if proper deployment of the NATO divisions could add a 1.2:1 advantage for the defense over the offense, NATO would have equal or better forces on M-Day and M+30. Moreover, McNamara later insisted that NATO could have more and better reserves than the Soviets if it would only undertake the minor expenditures necessary to make them effective, and therefore the West should have been able to equal or better the Warsaw Pact's long-range forces on the Central Front.⁷⁴

But McNamara was careful to define his projected Soviet threat as a "major" rather than an "all-out" Soviet invasion. He and the Joint Chiefs specifically differentiated between the two. They defined a "major assault" as one "based on full use of forces in being which are deployed or readily deployable to the area under attack." An "all-out assault," on the other hand, was one "based on full mobilization and use of all manpower and material reserves."⁷⁵

McNamara believed that NATO could afford to arm against a lesser threat in part because logistical difficulties would make it difficult for the Soviets to bring more than 95–105 divisions against the Central Front regardless of the number of divisions it might raise. He also thought that a larger attack, which he characterized as a "Rapid Full-Scale Nonnuclear Aggression" in which the Warsaw Pact built up its forces as rapidly as possible to an optimum size without NATO following suit, was highly unlikely. He said that the gap between NATO's planned forces and the "JCS 'objective' forces" necessary to defeat this all-out attack without resort to nuclear weapons would cost tens of billions of dollars for land forces alone over five years. He advised against trying to achieve this level of conventional preparedness because of its expense and because the size of the forces necessary to combat such an unlikely contingency was so uncertain. He even thought that "under reasonable (but by no means provable) assumptions present forces might permit stabilization of the battle line [against an all-out invasion] at some point East of the Rhine without NATO's initiating the use of nuclear weapons."⁷⁶

With the rather reluctant participation of the U.S. Joint Chiefs, McNamara and Kennedy imposed their plan for a more flexible response and no early use of nuclear weapons on NATO by getting Lyman Lemnitzer, the NATO commander, to move the defense line forward on the northern and southern ends of the Wesser/Lech line and to station a substantial force instead of a mere screening force east of that line. McNamara's intent now was to fight a decisive

74. McNamara, Draft Presidential Memorandum, 21 September 1966, NATO Strategy and Force Structure, pp. 5–14, NSA.

75. McNamara, Draft Presidential Memorandum, 26 October 1964 and 15 January 1965, The Role of Tactical Nuclear Forces in NATO Strategy, p. 32, NSA.

76. Ibid. McNamara, Draft Presidential Memorandum, 21 September 1966, NATO Strategy and Force Structure, pp. 5–14, NSA.

conventional battle in front of the Wesser/Lech line and resort to nuclear weapons only if that line were penetrated.⁷⁷

Unfortunately, France rebelled at the U.S. imposition of No Early First Use and dealt a major blow to McNamara's hope for a conventional deterrent in Europe when it withdrew its forces from NATO command in the mid-1960s. After that, McNamara sounded rather forlorn about NATO being able to cope conventionally with even a major, let alone an all-out, attack on Europe. He thought existing NATO land forces could still deal effectively with "small unexpected conflicts" involving as many as twenty to twenty-five Warsaw Pact divisions on the Central Front. NATO would also have rough equality with a "surprise nonnuclear attack" of twenty to thirty-six Warsaw Pact divisions on the Central Front aimed at a limited objective such as seizing Hamburg. But he thought NATO would have great difficulty keeping pace with Soviet mobilization if smaller conflicts spiraled into greater confrontations or if the Soviets responded to another Berlin crisis by mobilizing before attacking.⁷⁸

Thus, McNamara was unable to achieve what he thought was an adequate capability to defend against any probable Soviet attack on Europe without recourse to nuclear weapons.⁷⁹ Nevertheless, the United States and NATO had at least arrived at a point where they could implement the doctrine of "No Early First Use."

Unless something unexpected emerges from the military records of the Soviet Union, then, it seems clear that what we now perceive to be erroneous Western estimates of Soviet conventional capabilities were neither deliberate nor particularly significant for the policy choices U.S. and NATO leaders made. The overestimate of the size of Soviet conventional forces in 1948 was minor and did not betray Western political or military officials into believing that the

77. Memorandum for the Secretary of Defense, NATO Requirements Study (Project 106 C), 5 May 1961, RG 218, CCS 9030/3410, NATO (19 April 1961), sects. 1 and 2; memorandum for the Chief of Staff, US Representative to the Military Committee and Standing Group, NATO, Subject: NATO Requirements Study, 26 May 1961, RG 218, CCS 9030/3410, NATO (19 April 1961), sect. 1. Lemnitzer issued the official order for the forward No Early First Use strategy on 1 September 1963. James A. Hutson, *One for All: NATO Strategy and Logistics through the Formative Period, 1949-1969* (Newark, NJ, 1984), 98. The West Germans apparently assumed the strategy was a fait accompli even earlier. Their internal documents date the adoption of Flexible Response and No Early First Use from McNamara's Athens speech to the NATO foreign and defense ministers in the spring of 1962, even though the Americans thought of the Athens speech as "a request for NATO to adopt the strategy which the United States had adopted at the highest levels of the Kennedy administration." John Steinbrenner, *The Cybernetic Theory of Decision* (Princeton, 1974), 206. An den Herrn Minister Über Herrn Staatssekretar, 25 October 1963, Betr.: Sitzung des Verteidigungsrates am 31.10.1963, Hier: gegenwärtiger Stand der Verteidigungsvorbereitungen, Nuclear History Collection, Stiftung, Wissenschaft und Politik, Ebenhausen, Germany. For an excellent discussion of the debates over No Early First Use and the other aspects of the Kennedy strategy of Flexible Response see Jane E. Stromseth, *The Origins of Flexible Response: NATO's Debate over Strategy in the 1960s* (Hampshire, 1988), esp. 43-48, 128-29.

78. Stromseth, *The Origins of Flexible Response*, 11-15.

79. Apparently he was ready to advise against the first use of nuclear weapons anyway, if it finally came to such a decision. Robert S. McNamara, "The Military Role of Nuclear Weapons: Perceptions and Misperceptions," *Foreign Affairs* 62 (Fall 1983): 79.

Soviets were bent on a deliberate and imminent invasion of Europe. It was the decision to base Western military policy on Soviet capabilities rather than intentions and on maximum rather than minimum capabilities that determined the size and nature of the Western buildup, not the overestimate of those capabilities.

Neither did the 1948 overestimate of Soviet conventional capabilities distort the plans Western leaders made to try to balance Soviet conventional power oriented toward Europe. By the time the West was making its plans, the Soviets had acquired even more conventional power than the West estimated it had. Eisenhower and other Western military leaders still could have planned to meet a more likely lesser conventional threat rather than the maximum capability of the Soviets, as McNamara did in the 1960s. Such a policy might have reduced the need for the United States to race frantically to maintain its nuclear supremacy as a counterweight to Soviet conventional superiority in Europe. But until the 1960s, the West could only have planned for the eventual adoption of "No Early First Use"; it could not have implemented the policy. Not until after 1960 did the Western buildup, complemented by the Soviet conventional build-down, reach the point that there was any hope of stopping even the lesser of projected Soviet threats.